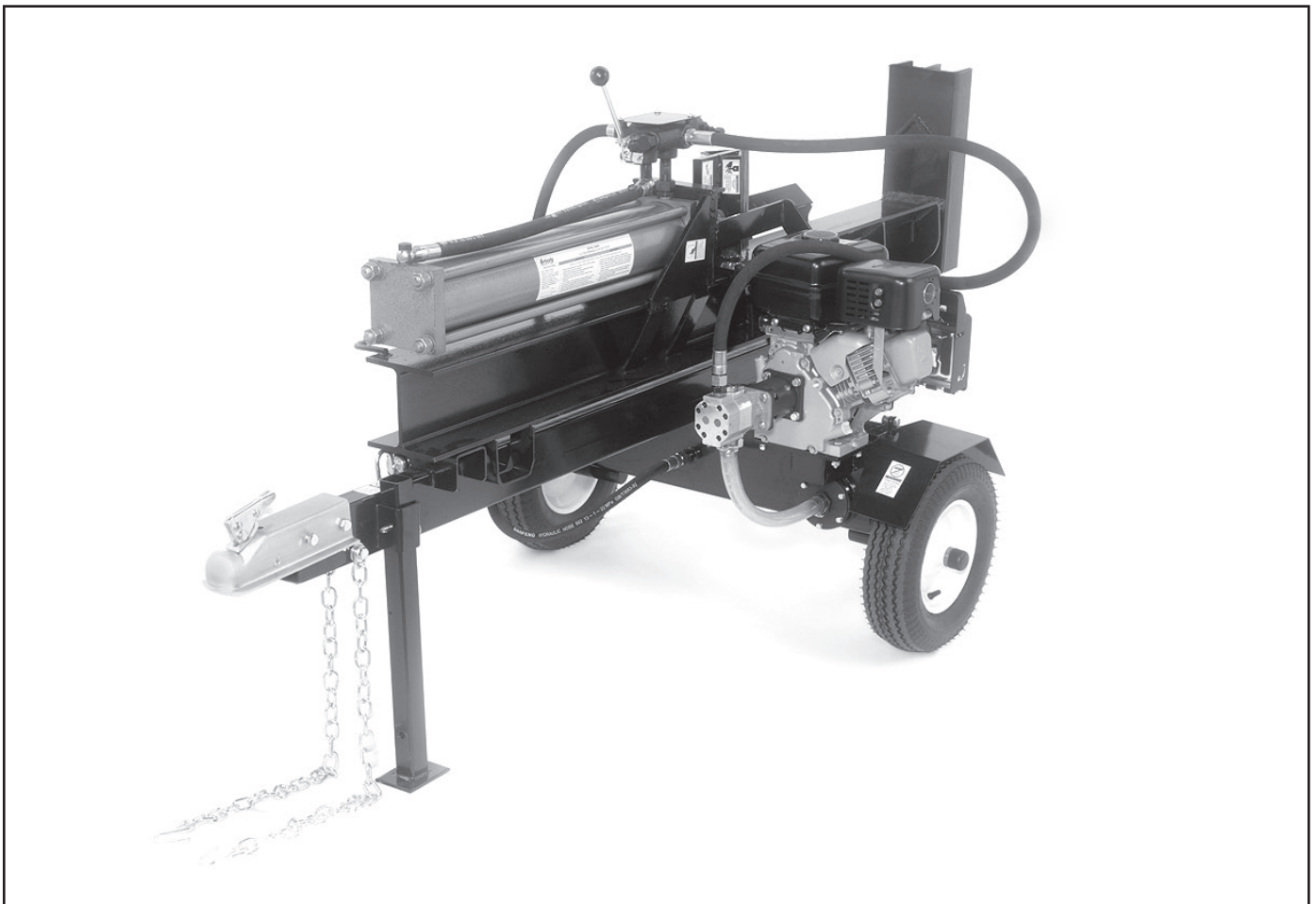


Grizzly *Industrial, Inc.*®

MODEL G0639 22-TON HYDRAULIC LOG SPLITTER OWNER'S MANUAL



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**WARNING: NO PORTION OF THIS MANUAL MAY BE REPRODUCED IN ANY SHAPE
OR FORM WITHOUT THE WRITTEN APPROVAL OF GRIZZLY INDUSTRIAL, INC.**

#CR9072 PRINTED IN CHINA



WARNING!

This manual provides critical safety instructions on the proper setup, operation, maintenance and service of this machine/equipment.

Failure to read, understand and follow the instructions given in this manual may result in serious personal injury, including amputation, electrocution or death.

The owner of this machine/equipment is solely responsible for its safe use. This responsibility includes but is not limited to proper installation in a safe environment, personnel training and usage authorization, proper inspection and maintenance, manual availability and comprehension, application of safety devices, blade/cutter integrity, and the usage of personal protective equipment.

The manufacturer will not be held liable for injury or property damage from negligence, improper training, machine modifications or misuse.



WARNING!

Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- **Lead from lead-based paints.**
- **Crystalline silica from bricks, cement and other masonry products.**
- **Arsenic and chromium from chemically-treated lumber.**

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: Work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

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INTRODUCTION

Foreword

We are proud to offer the Model G0639 22-Ton Hydraulic Log Splitter. This machine is part of a growing Grizzly family of fine equipment. When used according to the guidelines set forth in this manual, you can expect years of trouble-free, enjoyable operation and proof of Grizzly's commitment to customer satisfaction.

The specifications, drawings, and photographs illustrated in this manual represent the Model G0639 when the manual was prepared. However, owing to Grizzly's policy of continuous improvement, changes may be made at any time with no obligation on the part of Grizzly.

For your convenience, we always keep current Grizzly manuals available on our website at **www.grizzly.com**. Any updates to your machine will be reflected in these manuals as soon as they are complete. Visit our site often to check for the latest updates to this manual!

Contact Info

If you have any comments regarding this manual, please write to us at the address below:

Grizzly Industrial, Inc.
c/o Technical Documentation Manager
P.O. Box 2069
Bellingham, WA 98227-2069
Email: manuals@grizzly.com

We stand behind our machines. If you have any service questions or parts requests, please call or write us at the location listed below.

Grizzly Industrial, Inc.
1203 Lycoming Mall Circle
Muncy, PA 17756
Phone: (570) 546-9663
Fax: (800) 438-5901
E-Mail: techsupport@grizzly.com
Web Site: <http://www.grizzly.com>

If you have service or troubleshooting questions, or you need parts for your log splitter engine, please contact Briggs & Stratton Corporation at the location listed below.

Briggs & Stratton Corporation
Milwaukee, Wisconsin 53201
In the USA, Phone: (800) 233-3723
Web Site: <http://www.briggsandstratton.com>





MACHINE DATA SHEET

Customer Service #: (570) 546-9663 • To Order Call: (800) 523-4777 • Fax #: (800) 438-5901

MODEL G0639 22-TON HYDRAULIC LOG SPLITTER

Product Dimensions:

Weight 560 lbs.
Overall Length/Width/(Raised Height), (Lowered Height)..... 88" x 40" x (71"), (45")

Shipping Dimensions:

Type Single Wood Crate
Content..... Single Unit
Length/Width/Height..... 74" x 19" x 17"

Engine Information:

Manufacturer Briggs & Stratton
Family..... 6BSXS.2051HC 276719
Model I/C6.5 Industrial/Commercial
Cylinder Type..... Dura-Bore Cast Iron Sleeve
Main Bearing Type..... Dual Ball Bearing
Valve Style Overhead
Cylinders Single
Cylinder Head Hi-Flow
Displacement 206 cc, 12.57 cubic in.
Bore..... 2.69 cu/in
Stroke 2.20 in
Oil Capacity (Shipped Empty)..... 20 Oz
Fuel Capacity (Shipped Empty) 1 Gallon
Air Cleaner High Capacity Dual-Clean
Lubrication..... Splash Lubrication
Shipped with Oil No
Ignition..... Magneton
Governor Mechanical
Muffler Lo-Tone
Fuel Shutoff Valve..... Yes
Weight 34 lbs.

Hydraulic Information:

Maximum Pump Pressure..... 3000 PSI
Maximum Pump Flow 8 GPM
Hydraulic Fluid Capacity (Shipped Empty) 2.5 Gallons
Hydraulic Fluid Type 10W AW32, ASLE H-150, or ISO32
Pump Pressure Relief Setting..... 3000 PSI
Hydraulic Cylinder Bore 4" Dia
Hydraulic Cylinder Stroke 24"
Control Valve/Cylinder Operation Power Splitting, Neutral, and Power Retracting
Filter Type Reusable Tank Screen
Tank Type Vented



Chassis:

Type All Steel
 Tow Ball Receiver 2"
 Wheels and Tires Steel and Tubeless Tires (4.80/4.00-8)
 Wheel Bearing Type Bushing
 Towing Conditions Not Street Legal, Under 12 MPH, Off Road Only

Other Specifications:

Country Of Origin China
 Warranty 1 Year
 Serial Number Location ID Label on Hydraulic Cylinder
 Assembly Time 1.5 Hrs.

Features:

Heavy Duty Construction
 Power Splitter Retract
 24" Splitting Stroke
 22-Ton Splitter Load



Identification

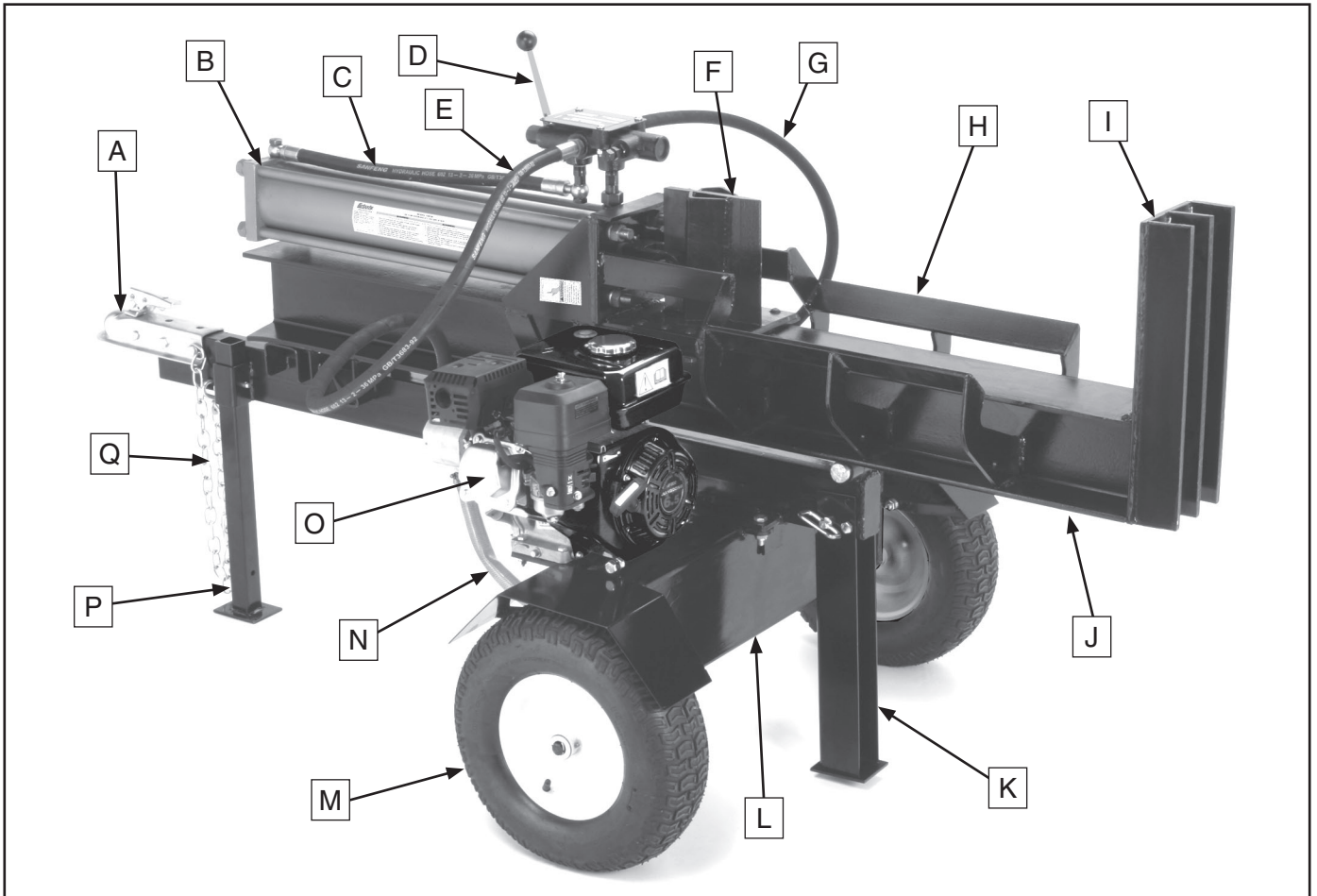


Figure 1. G0639 identification front view.

- | | |
|--|---|
| A. 2" Tow Ball Receiver | J. Splitter Beam |
| B. 4" Hydraulic Cylinder Assembly | K. Rear Landing Leg |
| C. Transfer Hose | L. Hydraulic Tank |
| D. Control Lever and Valve | M. Tubeless Tire |
| E. High Pressure Hydraulic Line | N. Low Pressure Hydraulic Suction Line |
| F. Splitter Wedge | O. Briggs & Stratton Gasoline Engine |
| G. Low Pressure Hydraulic Return Line | P. Front Landing Leg |
| H. Log Cradle | Q. Breakaway Safety Chain |
| I. Splitter Foot | |



SECTION 1: SAFETY

WARNING

For Your Own Safety, Read Instruction Manual Before Operating this Machine

The purpose of safety symbols is to attract your attention to possible hazardous conditions. This manual uses a series of symbols and signal words intended to convey the level of importance of the safety messages. The progression of symbols is described below. Remember that safety messages by themselves do not eliminate danger and are not a substitute for proper accident prevention measures.



Indicates an imminently hazardous situation which, if not avoided, **WILL** result in death or serious injury.



Indicates a potentially hazardous situation which, if not avoided, **COULD** result in death or serious injury.



Indicates a potentially hazardous situation which, if not avoided, **MAY** result in minor or moderate injury. It may also be used to alert against unsafe practices.

NOTICE

This symbol is used to alert the user to useful information about proper operation of the machine.

WARNING

Safety Instructions for Machinery

- 1. READ THE ENTIRE MANUAL BEFORE STARTING MACHINERY.** Machinery presents serious injury hazards to untrained users.
- 2. ALWAYS USE ANSI APPROVED SAFETY GLASSES WHEN OPERATING MACHINERY.** Everyday eyeglasses only have impact resistant lenses—they are NOT safety glasses.
- 3. ALWAYS WEAR A NIOSH APPROVED RESPIRATOR WHEN OPERATING MACHINERY THAT PRODUCES DUST.** Wood dust can cause severe respiratory illnesses.
- 4. ALWAYS USE HEARING PROTECTION WHEN OPERATING MACHINERY.** Machinery noise can cause permanent hearing loss.
- 5. WEAR PROPER APPAREL. DO NOT** wear loose clothing, gloves, neckties, rings, or jewelry that can catch in moving parts. Wear protective hair covering to contain long hair and wear non-slip footwear.
- 6. NEVER OPERATE MACHINERY WHEN TIRED OR UNDER THE INFLUENCE OF DRUGS OR ALCOHOL.** Be mentally alert at all times when running machinery.



WARNING

Safety Instructions for Machinery

7. **ONLY ALLOW TRAINED AND PROPERLY SUPERVISED PERSONNEL TO OPERATE MACHINERY.** Make sure operation instructions are safe and clearly understood.
8. **KEEP CHILDREN AND VISITORS AWAY.** Keep all children and visitors a safe distance from the work area.
9. **MAKE WORKSHOP CHILDPROOF.** Use padlocks, master switches, and remove start switch keys.
10. **NEVER LEAVE WHEN MACHINE IS RUNNING.** Turn power **OFF** and allow all moving parts to come to a complete stop before leaving machine unattended.
11. **DO NOT USE IN DANGEROUS ENVIRONMENTS.** DO NOT use machinery in damp, wet locations, or where any flammable or noxious fumes may exist.
12. **KEEP WORK AREA CLEAN AND WELL LIGHTED.** Clutter and dark shadows may cause accidents.
13. **USE A GROUNDED EXTENSION CORD RATED FOR THE MACHINE AMPERAGE.** Grounded cords minimize shock hazards. Undersized cords create excessive heat. Always replace damaged extension cords.
14. **ALWAYS DISCONNECT FROM POWER SOURCE BEFORE SERVICING MACHINERY.** Make sure switch is in OFF position before reconnecting.
15. **MAINTAIN MACHINERY WITH CARE.** Keep blades sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
16. **MAKE SURE GUARDS ARE IN PLACE AND WORK CORRECTLY BEFORE USING MACHINERY.**
17. **REMOVE ADJUSTING KEYS AND WRENCHES.** Make a habit of checking for keys and adjusting wrenches before turning machinery **ON**.
18. **CHECK FOR DAMAGED PARTS BEFORE USING MACHINERY.** Check for binding or misaligned parts, broken parts, loose bolts, and any other conditions that may impair machine operation. Repair or replace damaged parts before operation.
19. **USE RECOMMENDED ACCESSORIES.** Refer to the instruction manual for recommended accessories. Improper accessories increase risk of injury.
20. **DO NOT FORCE MACHINERY.** Work at the speed for which the machine or accessory was designed.
21. **SECURE WORKPIECE.** Use clamps or a vise to hold the workpiece when practical. A secured workpiece protects your hands and frees both hands to operate the machine.
22. **DO NOT OVERREACH.** Maintain stability and balance at all times.
23. **MANY MACHINES CAN EJECT WORKPIECES TOWARD OPERATOR.** Know and avoid conditions that cause the workpiece to "kickback."
24. **ALWAYS LOCK MOBILE BASES (IF USED) BEFORE OPERATING MACHINERY.**
25. **CERTAIN DUST MAY BE HAZARDOUS** to the respiratory systems of people and animals, especially fine dust. Be aware of the type of dust you are exposed to and always wear a respirator designed to filter that type of dust.



WARNING

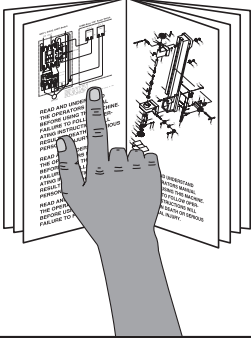
Additional Safety Instructions for Hydraulic Log Splitters

1. **PROTECTING CHILDREN.** Keep children away from the log splitter at all times! It is not a toy. Never allow any child to climb onto the log splitter.
2. **ADEQUATE VENTILATION.** The log splitter engine produces carbon monoxide, which is a poisonous gas. Make sure the work area is adequately ventilated. Never operate this machine indoors or in any type of enclosed area including a carport.
3. **HOT ENGINE.** Motor parts get hot during operation. Allow to cool before placing hands near motor, adding fuel, or performing any service or maintenance.
4. **FUEL SPILLS.** Fuel exposed to hot engine components may ignite. Thoroughly clean all fuel spills before starting the engine.
5. **FLUID INJECTION.** Fluid pressures developed from this machine are up to 3000 PSI, which are high enough to penetrate your skin and enter your bloodstream. Hydraulic fluid injected into your bloodstream is a medical emergency. If not treated immediately, this blood poisoning could result in an aggressive infection, amputation, or death. Keep body parts away from any high pressure hydraulic leak.
6. **TROUBLESHOOTING.** Some high pressure streams can be almost invisible to the naked eye. If you suspect a hydraulic leak, DO NOT use your hand or fingers to locate it. Instead keep your skin at least 12" away from potential leaking areas and move a strip of cardboard to the areas where the leak may exist and watch to see if hydraulic oil is sprayed onto the cardboard.
7. **HYDRAULIC PRESSURE RELIEF VALVE.** Adjusting the pressure limit screw may lead to a hydraulic explosion and seriously injure the operator and bystanders. The pressure relief valve is factory set and should not be adjusted unless by a professional hydraulic technician.
8. **TOWING.** This log splitter is not designed to be towed on logging roads, forest service roads, public roads, or highways. This machine is designed for job site towing only where maximum speed will not exceed 12 MPH.
9. **CORRECT USAGE.** Never split wood across the grain or use the log splitter to split concrete blocks, rocks, or to bend metal.
10. **WORKPIECE SELECTION.** Logs with extensive knotting may be difficult or impossible to split. Making repeated attempts to split an unsuitable log will increase wear on the pressure relief valve, hydraulic lines, and increase the risk of operator injury.
11. **CORRECT USAGE.** Never attempt to split more than one log at a time. Doing so may cause logs to fly off the splitter with great force, resulting in serious injury or death.
12. **SUPPORTING LOGS BY HAND.** Never use any part of your body to guide or steady a log when the ram is moving. Failure to follow this instruction can result in serious personal injury, including loss of limbs.
13. **MACHINE LOCATION.** Never leave the splitter unattended and running, always block the wheels to prevent rolling, and store the unit in a locked location.




SECTION 2: SETUP

Setup Safety




!WARNING
This machine presents serious injury hazards to untrained users. Read through this entire manual to become familiar with the controls and operations before starting the machine!



!WARNING
Wear safety glasses during the entire setup process and during operations!



!WARNING
Wear gloves during the entire setup process and during operations!



!WARNING
This log splitter is heavy. Get help whenever tilting the hydraulic ram and beam back and forth between the horizontal and vertical positions.

Items Needed for Setup

The following items are needed to complete the setup process, but are not included with your machine:

Needed Items	Qty.
• Hoist 1000 lb. Min. Capacity	1
• Lifting Straps 1000 lb. Min. Capacity	2
• Safety Glasses for Each Person	1 Ea
• Pair of Gloves for Each Person.....	1 Ea
• Combination Wrench Set, 10-18mm	1 Ea
• Screwdrivers #2 Standard.....	2

Unpacking

Your machine was carefully packaged for safe transportation. Remove the packaging materials from around your machine and inspect it. If you discover the machine is damaged, *please immediately call Customer Service at (570) 546-9663 for advice.*

Save the containers and all packing materials for possible inspection by the carrier or its agent. *Otherwise, filing a freight claim can be difficult.*

When you are completely satisfied with the condition of your shipment, inventory the contents.



Inventory

After all the parts have been removed from the shipping crate, you should have the following:

Box Contents (Figure 2):	Qty
A. Hydraulic Tank.....	1
B. Hydraulic Cylinder and Beam Assembly	1
C. Briggs & Stratton Engine.....	1
D. Wheel & Tire	2
E. Briggs & Stratton Engine Manual.....	1
F. Fenders	2
G. Frame Tube Assembly	1
H. Rear Landing Leg.....	1
I. Tow Ball Receiver.....	1
J. Front Landing Leg	1
K. Breakaway Safety Chains with Hooks	2

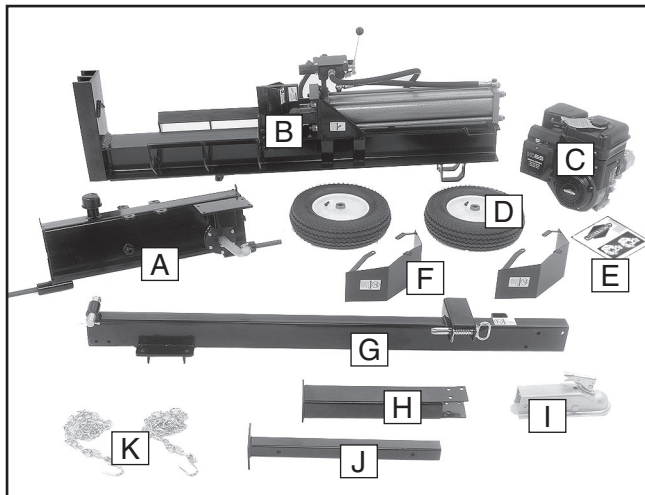


Figure 2. G0639 main parts inventory.

Hardware Bag Contents (Figure 3):	Qty
L. Hub Caps (Wheels).....	2
M. Flat Washers 20mm (Wheels).....	2
N. Cotter Pins 3 X 30mm (Wheels)	2
O. Hex Bolts M10-1.5 X 25 (Fenders).....	6
P. Flat Washers 10mm (Fenders).....	6
Q. Lock Washers 10mm (Fenders).....	6
R. Hex Nuts M10-1.5 (Fenders)	6
S. Seal Washers (Hydraulics).....	5
T. O-rings 15.8 X 2.4 P16 (Hydraulics).....	2
U. O-rings 11 X 2.4 P11.2 (Hydraulics).....	2
V. Teflon Tape (Hydraulics).....	1
W. Pressure Fitting (Hydraulics).....	1
X. Hitch Pin (Rear Landing Leg).....	1
Y. R-pin 3 X 55mm (Rear Landing Leg).....	1
Z. Cotter Pin 2 X 10mm (Control Lever).....	1

AA. Hex Bolts M8-1.25 X 45 (Engine Mount)....	4
AB. Flat Washers 8mm (Engine Mount)	4
AC. Lock Washers 8mm (Engine Mount).....	4
AD. Hex Nuts M8-1.25 (Engine Mount).....	4
AE. Lock Pin (Front Landing Leg).....	1
AF. Hex Bolt M12-1.75 X 90 (Rr. Landing Leg) .	1
AG. Flat Washer 12mm (Rear Landing Leg).....	1
AH. Lock Nut M12-1.75 (Rear Landing Leg).....	1
AI. Hex Bolts M12-1.75 X 40 (Frame to Tank)..	4
AJ. Flat Washers 12mm (Frame to Tank).....	4
AK. Lock Nuts M12-1.75 (Frame to Tank).....	4

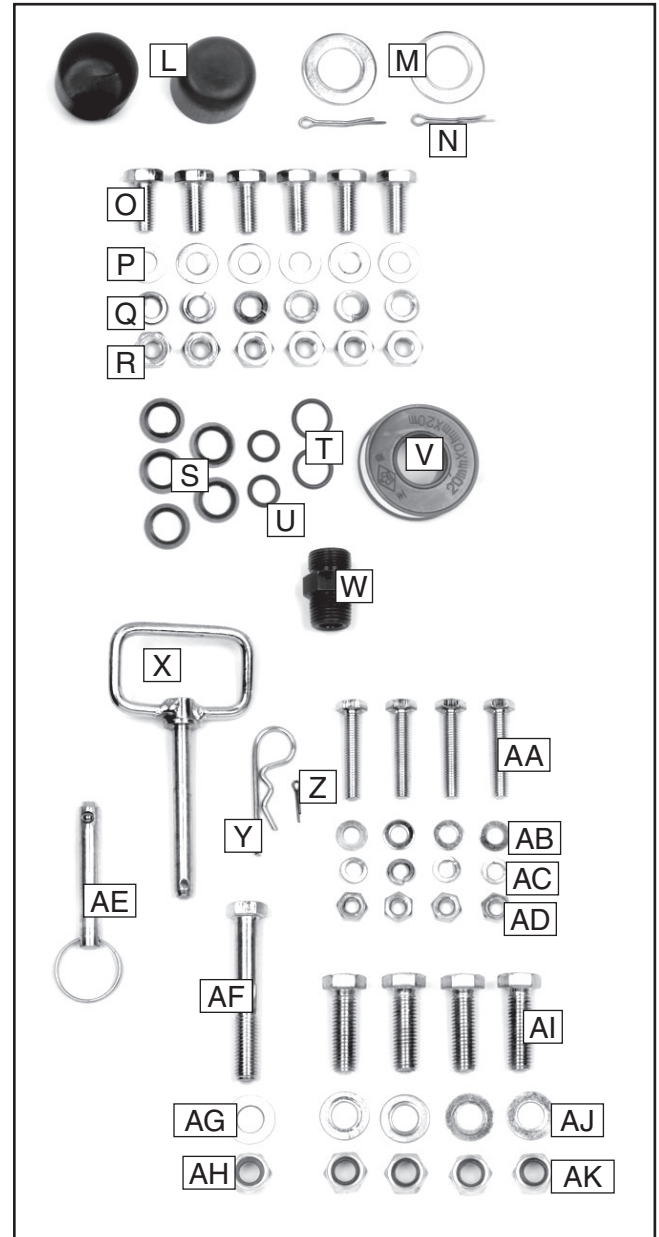


Figure 3. G0639 small parts inventory.



Assembly

To assemble the log splitter:

1. Wipe a dab of multipurpose grease onto the spindle and wheel bushing, and with the valve stem facing outward, slide the wheel onto the axle until it stops. See towing warnings.
2. Place the 20mm flat washer onto the axle, then place the 3 x 30mm cotter pin through the hole in the spindle end (**Figure 4**).
3. Bend both cotter pin tangs so the wheel is held onto the axle, and tap the hubcap onto the wheel.

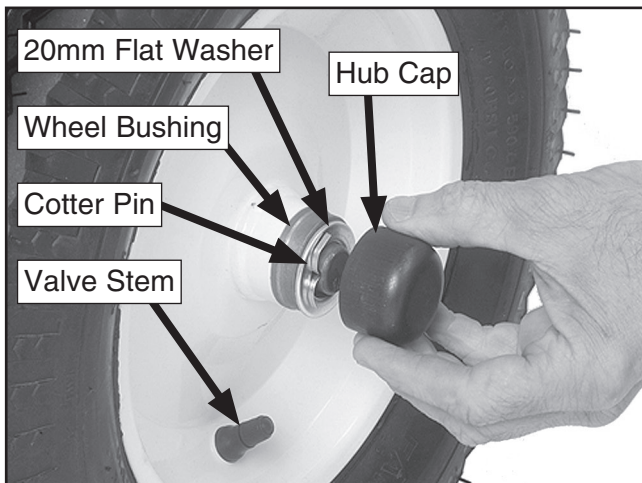


Figure 4. Attaching the wheels.

4. Place the frame tube onto the hydraulic tank and secure it together with four M12-1.75 x 40 hex bolts, four flat washers, and the lock nuts as shown in **Figure 5**.

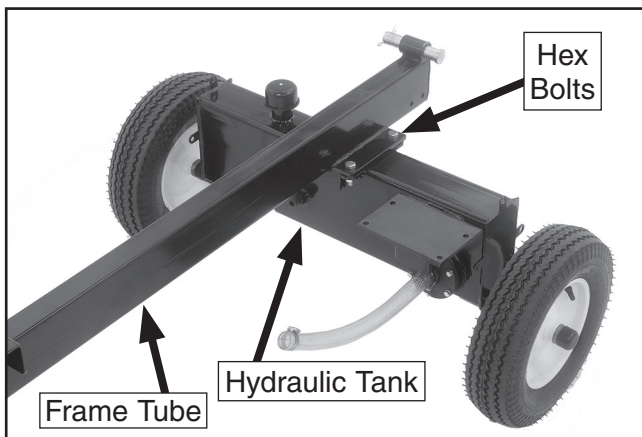


Figure 5. Frame tube and tank.

Model G0639 22-Ton Hydraulic Log Splitter

5. Place the front leg into the receiver and insert the lock pin, as shown in **Figure 6**.
6. Install the tow ball receiver with its attached bolts, and use the attached M12-1.75 x 85 hex bolt, flat washer, and lock nut to install the safety chains as shown in **Figure 6**.

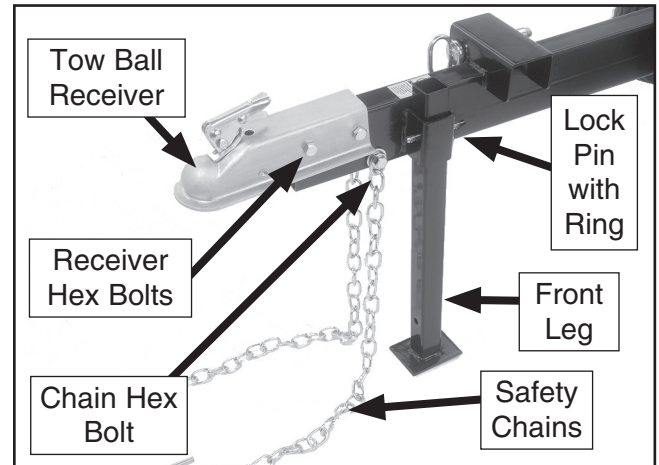


Figure 6. Towing kit.

7. Place the fenders onto the hydraulic tank and secure them in place with the remaining M10-1.5 x 25 hex bolts, flat washers, lock washers, and nuts as shown in **Figure 7**.

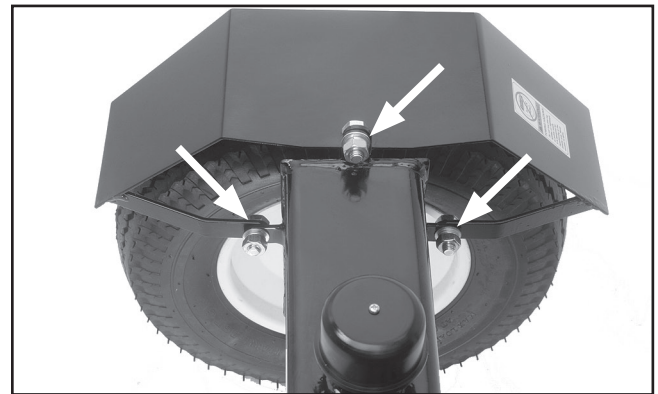


Figure 7. Fender installation.

⚠️ WARNING

The Model G0639 log splitter is not designed to be towed on logging roads, forest service roads, public roads, or highways. This machine is designed for job site towing only where maximum speed will not exceed 12 MPH. The log splitter must be transported between job sites on a trailer capable of carrying 1000 lbs.



8. Install the rear leg onto the frame with the M10-1.5 x 75 pivot bolt, flat washer, and lock nut as shown in **Figure 8**.
9. Raise the leg and lock it in place with the lock pin and 2 x 15mm cotter pin as shown in **Figure 8**.

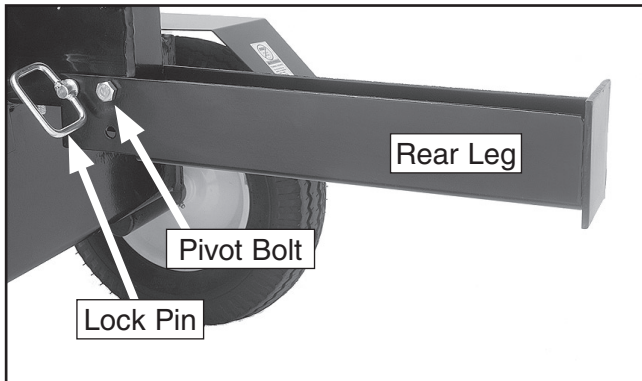


Figure 8. Rear leg installation.

10. This cylinder and beam assembly is top heavy, so loop a lifting strap rated for at least 1000 lbs through the front beam lock eyes at the location shown in **Figure 9**.

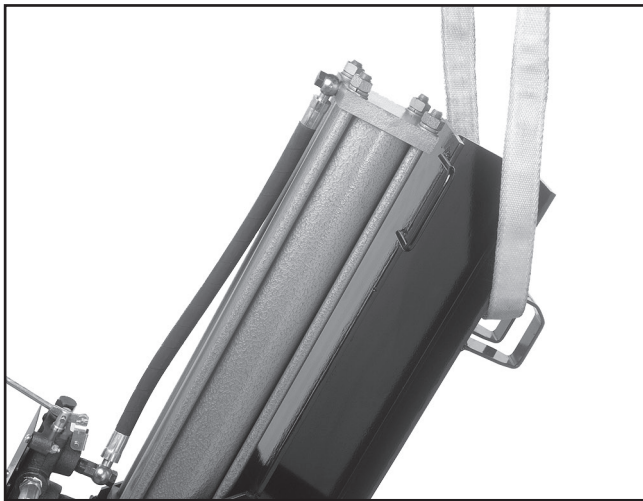


Figure 9. Main lifting location.

11. Add additional lifting straps or chains as required for your lifting apparatus so the beam can be lifted without a sudden load shift.

12. Using a mechanical lifting device that can support at least 1000 lbs., lift the cylinder and beam assembly and secure it in the hinge with the hinge pin.
13. Bend the hinge pin cotter pin so the hinge pin cannot fall out.

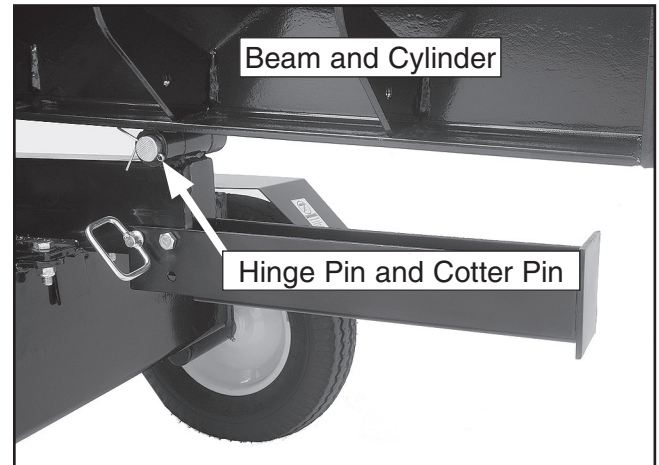


Figure 10. Beam and cylinder hinge pin.

14. Lock the beam in place in the horizontal position with the spring loaded lock pin shown in **Figure 11**.

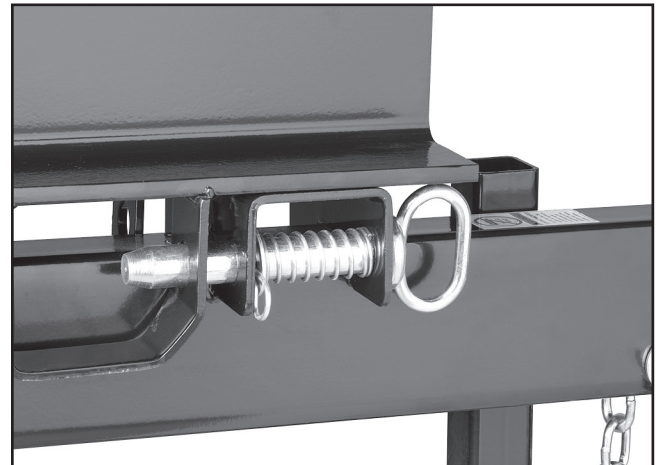


Figure 11. Beam lock.



15. Prepare the engine mounting plate by removing any dirt, paint chips, or foreign material, and place the engine onto the pad shown in **Figure 12**.

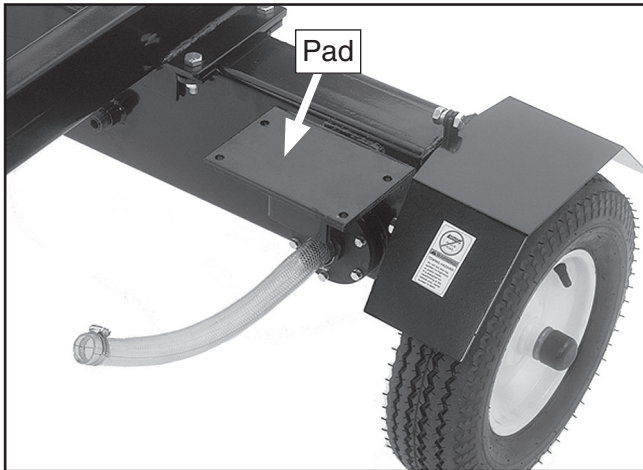


Figure 12. Engine mounting pad.

16. Secure the engine with the four M8-1.25 x 45 hex bolts, flat washers, lock washers, and hex nuts as shown in **Figure 13**.
17. Tighten the fasteners in an alternating pattern evenly, so you do not risk cracking the mounting flange shown in **Figure 13**.

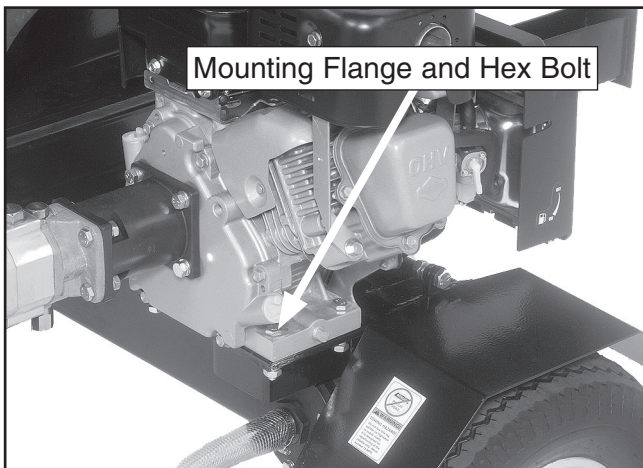


Figure 13. Installed engine.

18. Wrap the pressure-fitting pipe threads with Teflon tape as shown in **Figure 14**.

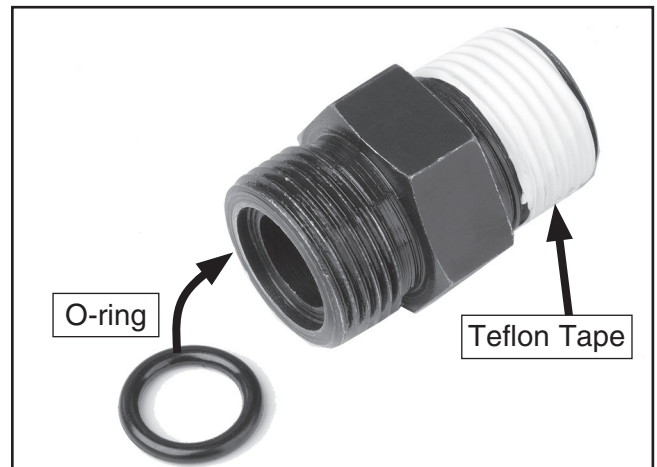


Figure 14. Pressure fitting.

19. Wipe oil onto one of the 11 x 2.4mm O-rings and seat it into the O-ring seat in the end of the pressure fitting (**Figure 14**).
20. Remove the plastic cap from the pump pressure port and, add a couple of tablespoons of hydraulic oil into the pressure port (**Figure 15**).
21. Thread the Teflon tape end of the pressure fitting into this pump port, and tighten the fitting only until it is snug. **DO NOT** overtighten or you can crack the pump housing.

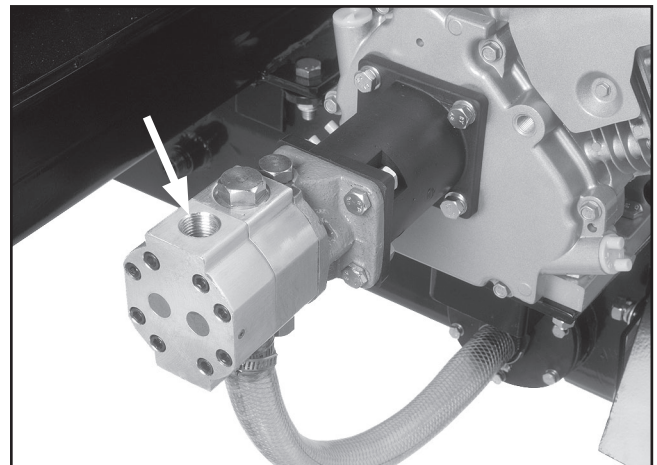


Figure 15. Pump pressure port.

22. Loosen the hose clamp, install the pump suction hose onto the pump suction port (**Figure 15**), and tighten the hose clamp.



23. Using a screwdriver, unthread the plastic plug from the high pressure hose (**Figure 16**).

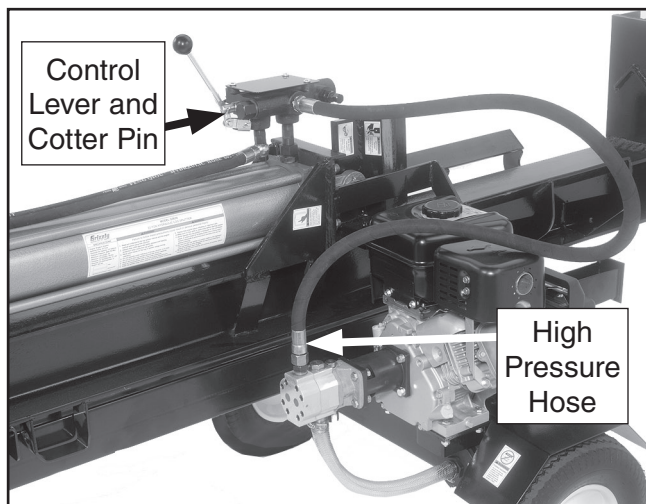


Figure 16. High pressure hose and control lever.

24. Install the high pressure hose onto the pump pressure fitting (**Figure 16**), making sure the O-ring stays in place.
25. Connect the control lever (**Figure 16**) to the control valve linkage with the clevis pin.
26. Remove the plastic cap from the tank return fitting (**Figure 17**), oil and install an 11 x 2.4mm O-ring on the end of the fitting.
27. Using a screwdriver, unthread the plastic plug from the low pressure return hose (**Figure 17**).
28. Install the low pressure return hose onto the tank return fitting (**Figure 17**), making sure the O-ring stays in place.

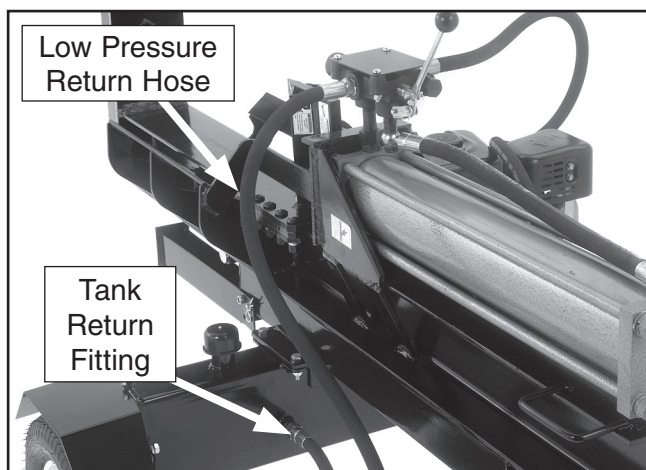


Figure 17. Low pressure hose and tank fitting.

29. Pull the tank vent cap (**Figure 18**) off, fill the hydraulic tank with 2.5 gallons of hydraulic oil, and reinstall the cap.

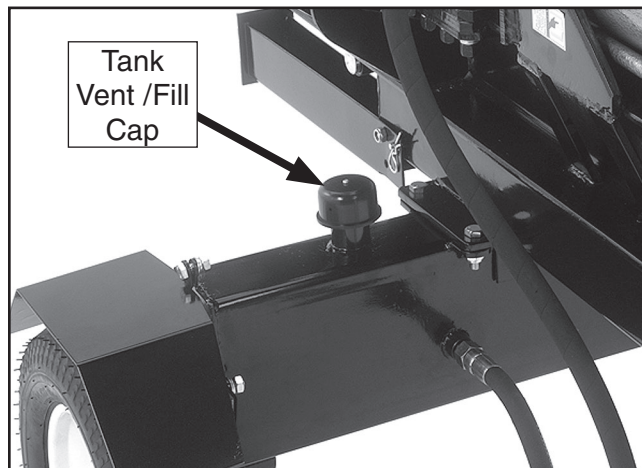


Figure 18. Tank vent cap.

30. Refer to the Briggs & Stratton owner's manual to select your required oil type, locate the fill plug (**Figure 19**), and fill the engine with the required engine oil.

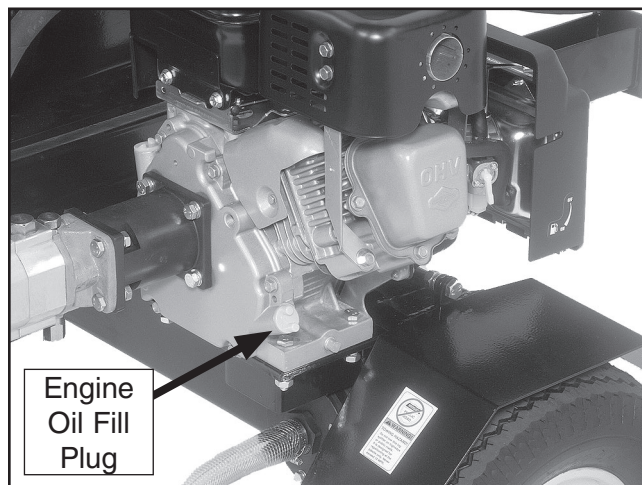


Figure 19. Engine oil fill plug.



Test Run/Break-In

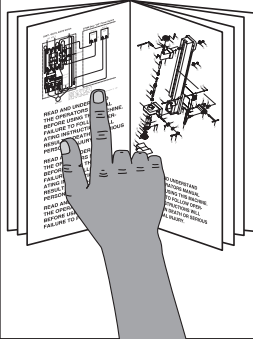
During this procedure do not leave the area.

To test run and break-in the log splitter:


1. Read and understand the Briggs & Stratton engine manual that accompanied this log splitter and follow all safety precautions.
2. Read and understand this entire manual and follow all safety precautions.
3. Make sure the hydraulic tank and engine have been filled to the required oil levels.
4. Start the engine and let it run at 75% throttle for one hour to break in the motor.
5. Move the control lever to cycle the log splitter ram back and forth periodically during the break-in process to bleed the hydraulic system and look for oil leaks. Do not operate the log splitter at full load until after the engine break-in has been completed.
6. After the first 5 to 10 hours of initial operation, change the engine oil.

If any problem or oil leak is found, before you troubleshoot or correct the problem:

1. Shut the engine down immediately and let it cool for at least 15 minutes to prevent burn injuries.
2. Disconnect the spark plug wire from the spark plug to prevent the possibility of accidental start-up.
3. If an oil leak is suspected or seen, DO NOT touch the area to find the leak. Move the control lever completely to the forward and backward positions to relieve any hydraulic pressure and prevent the possibility of any hydraulic injection fluid injury during repair.
4. Refer to **Troubleshooting** on **Page 22** for solutions, or call Technical Support at (570) 546-9663.



⚠️ WARNING
This machine presents serious injury hazards to untrained users. Read through this entire manual and the Briggs & Stratton engine manual to become familiar with the controls and operations before starting engine and using the log splitter!



⚠️ WARNING
HYDRAULIC INJECTION HAZARD.
Hydraulic oil leaks can be under sufficient pressure to penetrate your skin and enter your bloodstream. If oil is injected into any part of your body, it is a medical emergency and may, if not treated immediately, result in severe infection, permanent disability, or even death.



SECTION 3: OPERATIONS

Operation Safety

WARNING

Damage to your eyes and hearing could result from using this machine without proper protective gear. Always wear safety glasses and hearing protection, when operating this machine.



WARNING

NEVER run the engine indoors such as in a garage, barn, carport, or storage shed even if it is ventilated. Engine exhaust is poisonous and can kill animals and you without warning.



WARNING

Always wear gloves when operating this log splitter!

NOTICE

If you have never used this type of machine or equipment before, WE STRONGLY RECOMMEND that you read books, trade magazines, or get formal training before beginning any projects. Regardless of the content in this section, Grizzly Industrial will not be held liable for accidents caused by lack of training.

Job Site Considerations

Work Location

Only use this log splitter outdoors, and never leave the area while the engine is running. **NEVER** run the engine indoors like in a garage, barn, carport, or storage shed even if it is ventilated. Engine exhaust is poisonous and can kill animals and you without warning.

Always use the splitter on a flat, stable work surface, and block the log splitter wheels so it cannot roll forward or backwards.

Position the log splitter in a well lit, flat area at least seven feet away from any dry leaves or combustibles, and at least 25 feet from any fresh air intake supplying working or living areas.

Working Clearances

Allow enough room on all sides to move logs to and from the splitter.

Keep your work zone clear of lumber to avoid tripping hazards while using the machine.



Transporting

!WARNING

The Model G0639 log splitter is not designed to be towed on logging roads, forest service roads, public roads, or highways. This machine is designed for job site towing only where maximum speed will not exceed 12 MPH. The log splitter must be transported between job sites on a trailer capable of carrying 1000 lbs.

To tow the splitter:

1. Lower the log splitter cylinder and beam to the horizontal position and lock it in place.
2. Raise and lock the front and rear landing legs in the uppermost position with the lock pins.
3. Unlatch the receiver lock lever and place the receiver onto the tow ball.
4. Make sure that the tow ball is fully seated inside of the receiver.
5. Push down on the receiver lock lever until it pulls the lock tongue up against the underside of the tow ball and locks the tow ball and receiver together.
6. Secure the safety chains to the tow vehicle and double check all your connections.
7. Close the fuel shutoff valve on the engine carburetor.
8. Make sure that the engine gas cap is secure and that there are no tools or lumber still on the log splitter. Never allow any riders or cargo on this log splitter while towing.
9. Tow this log splitter responsibly! Do not tow it while the engine is operating, and take precautions to make sure the machine will not tip over during towing, causing a fuel leak and possible fire.

Control Valve

When the engine is running and the control valve lever is in the neutral position (**Figure 20**), the hydraulic pump delivers hydraulic fluid at 8 GPM through the control valve and back into the hydraulic tank.

When you push the control lever to the forward position, the control valve diverts hydraulic fluid up to 3000 PSI to one side of the 4" splitter piston moving the splitter wedge into the log and splitting the log in half. The maximum distance of the wedge stroke is 24".

When you push the control lever to the full backward position, the lever locks in retract mode, and the control valve diverts the hydraulic fluid to the other side of the splitter piston. As a result, both of your hands are free to load the next log for splitting. When the ram fully retracts, the control lever automatically moves back to neutral, and the log splitter is ready to split another log.

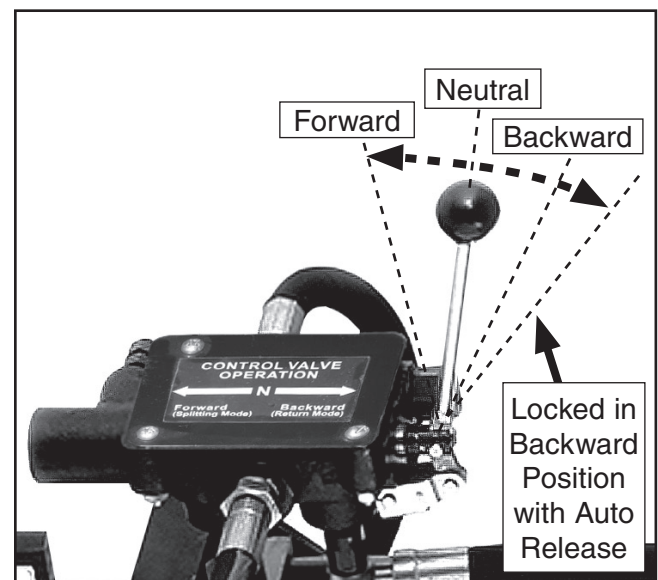


Figure 20. Control valve lever positions.



Splitting Logs

This log splitter is ONLY designed to split wood with the grain direction. DO NOT attempt to split or crush wood against the grain, or split brick, concrete blocks, or rock. If you do, you will damage the machine, void the warranty, and possibly severely injure or kill bystanders or yourself.

To operate the log splitter:

1. Read and understand this entire manual and the Briggs & Stratton engine operators manual.
2. Verify that your job site location meets at least the minimum requirements for safety and use. Refer to **Job Site Considerations** on **Page 16** for details.
3. Lower the rear landing leg and secure it in place with the lock pin.
4. Move the ram and beam assembly to the vertical position and lock it in place with safety chain shown in **Figure 21**.
5. Closely inspect all components and hydraulic lines for any evidence of damage, wear, or unsafe conditions; and correct before proceeding any further.
6. Put on your safety glasses, hearing protection, and thick leather gloves.
7. Start the engine, and place the log to be split in the splitting cradle.
8. Make sure bystanders are out of the work zone and the zone is clear of split lumber.
9. While keeping hands clear of the splitting wedge, use the control lever to split the log, retract the wedge, and remove the split log from the work zone.

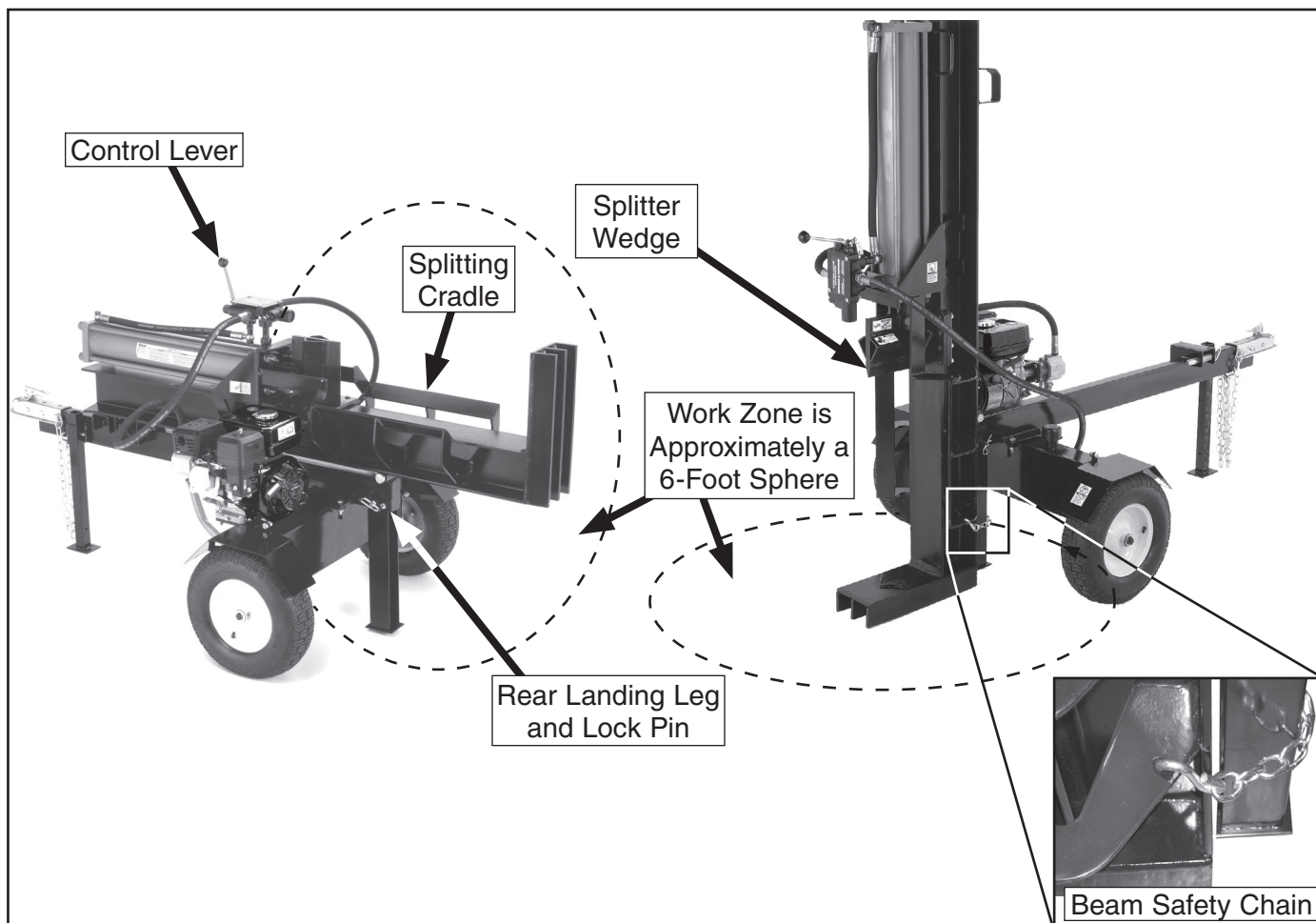
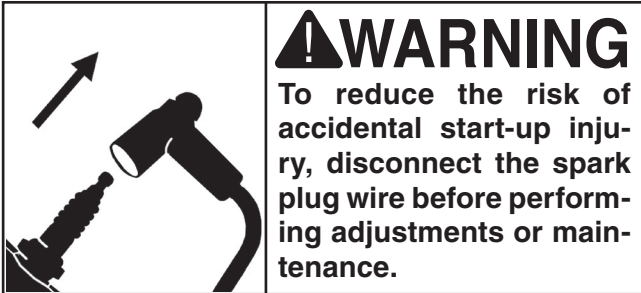


Figure 21. Log splitter positions.



SECTION 4: MAINTENANCE



Cleaning

For optimum performance from your log splitter, clean it with a brush after every use and wipe it down occasionally with a rag.

Schedule

Follow the maintenance schedule below and refer to any specific instructions given in this section.

Before each use:

- Make sure hydraulic oil and engine oil levels are full.
- Make sure leaks, kinks, or abrasions do not exist in hydraulic hoses or fuel lines.
- Inspect for loose or bent components.
- Inspect that safety features, and appropriate guards are working and are in place.

Every 150 hours of use:

- Clean hydraulic tank vent cap (**Figure 22**) with solvent, and let air dry, and reinstall.

As needed:

- Remove wheels and clean and relubricate wheel bushings with multipurpose grease at least every six months.
- Inspect for burnt-smelling, or tan-colored water contaminated hydraulic fluid. If contaminated, replace tank breather, clean tank filter/strainer, flush system, and replace fluid.
- Refer to the Briggs & Stratton engine manual for general engine maintenance schedules.

Checking/Adding Hydraulic Fluid

To check the hydraulic fluid level:

1. Position the log splitter on level ground, lower the front landing leg, and lock the leg in place.
2. Wipe the vent cap with a clean rag and remove the vent cap shown in **Figure 22**.

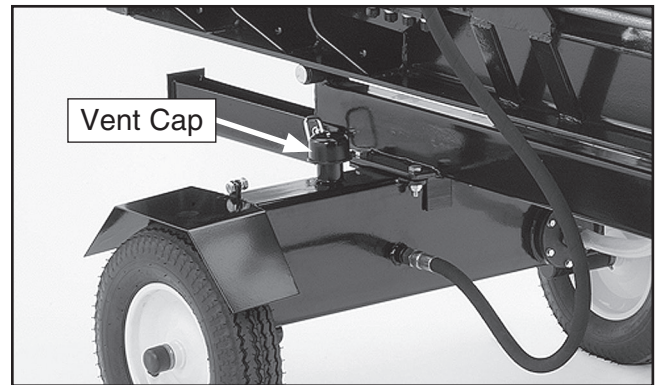


Figure 22. Vent cap location.

3. Shine a flashlight down into the vent port until you see hydraulic fluid. The fluid surface should be 1" from the top of the hydraulic tank as shown in **Figure 23**.
4. Add hydraulic fluid as required.

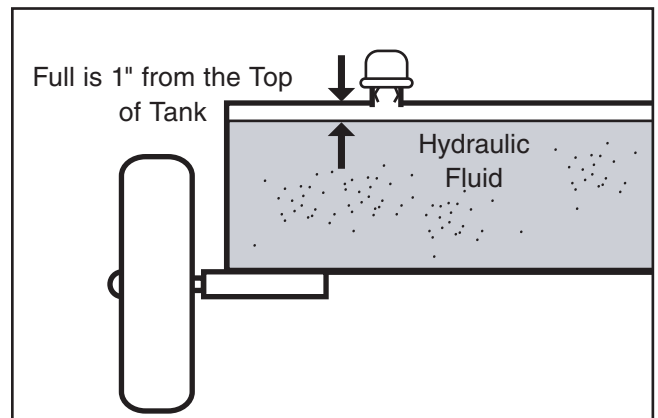
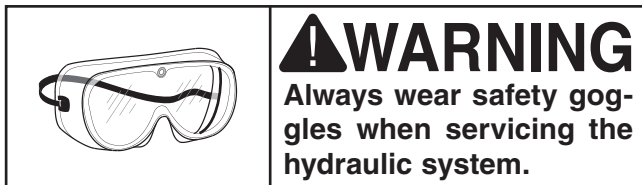


Figure 23. Hydraulic fluid level.



Changing Hydraulic Fluid

Inspect for burnt-smelling or tan-colored water contaminated hydraulic fluid. If contaminated, replace tank breather, clean tank filter/strainer, flush system, and replace fluid.



To change the hydraulic fluid:

1. Chock the log splitter wheels to prevent it from rolling.
2. Place a 3-gallon or larger drain pan under the tank filter screen cover.
3. Loosen the screen cover hex bolts and carefully dislodge the cover slightly so the hydraulic fluid fills the drain pan (**Figure 24**).

Note: Do not lose the rubber gasket in the drain pan.



Figure 24. Draining hydraulic fluid.

4. When the tank is empty, remove the bolts the rest of the way and then remove the tank screen.
5. Pull the tank vent off.
6. Clean the tank vent with mineral spirits and let air dry.
7. Clean the tank screen with mineral spirits and blow dry with compressed air.
8. Inspect the screen and tank vent for any holes and replace if any damage exists.
9. Reach into the tank and wipe out as much residual fluid and contaminants as possible. We highly recommend that the tank be cleaned out with a pressure washer or steam cleaner and fully dried with compressed air for best results.
10. Reinstall the tank screen, rubber gasket, and hose.
11. Fill the tank with 2.5 gallons of hydraulic fluid and reinstall the tank vent cap.



Sharpening the Splitting Wedge

	<p>! WARNING Always wear leather gloves when sharpening the splitting wedge.</p>
---	---

During the life of your log splitter, you will need to sharpen the splitting wedge periodically. When sharpening the wedge, keep in mind that if you try and keep the wedge sharpened to a razor point (like an axe blade), you will greatly reduce the life of the wedge by always sharpening it. However, if you allow the point to become very dull or bullnosed, your log splitter will have to overwork to split logs, which will decrease the lifespan of the splitter. The optimum point is somewhere between. Refer to **Figure 25** for a general idea.

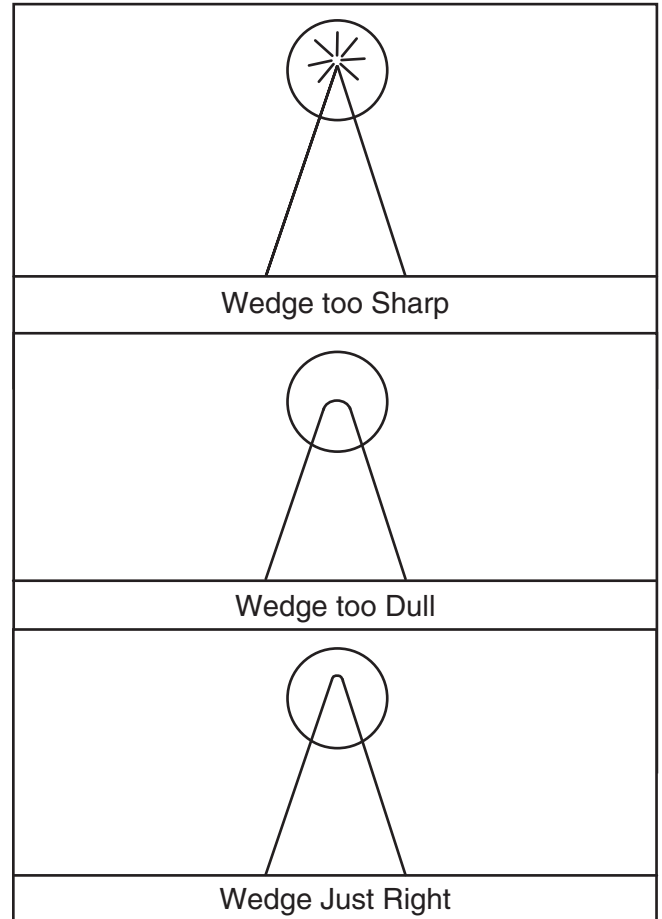


Figure 25. Wedge points.



SECTION 5: SERVICE

Review the troubleshooting and procedures in this section to fix or adjust your machine if a problem develops. If you need replacement parts or you are unsure of your repair skills, then feel free to call our Technical Support at (570) 546-9663. For engine troubleshooting and repair questions contact Briggs & Stratton at 1-800-233-3723, or www.briggsandstratton.com.

Troubleshooting

Operation

Symptom	Possible Cause	Possible Solution
Engine won't start, hard to start, stalls, runs rough, smokes, or is underpowered.	<ol style="list-style-type: none"> 1. The fuel is stale or has water in it. 2. Engine oil is low or diluted. 3. Clogged air filter. 4. Fuel shutoff valve or line is at fault. 5. Choke linkage is at fault. 6. Spark plug wire or spark plug is at fault. 7. Carburetor is at fault, or has a vacuum leak. 8. Ignition is at fault. 9. The engine has had it! 	<ol style="list-style-type: none"> 1. Replace with new regular grade gasoline. 2. Make sure the engine oil level is full, or change the engine oil. 3. Replace air filter. 4. Open the valve, replace the valve, replace fuel line. 5. Make sure choke butterfly valve opens and closes fully with the throttle lever linkage. 6. Replace spark plug wire or reconnect wire to spark plug. Repair for fuel or oil fouling spark plug, and replace spark plug. 7. Tighten loose carburetor, repair/replace leaking gaskets/hoses and/or rebuild carburetor. 8. Make sure the ignition switch is in the ON position, if no spark exists, replace the magneto unit. 9. Rebuild or replace the engine.
Splitter wedge moves forward and backwards too slowly, or does not move in either direction.	<ol style="list-style-type: none"> 1. Control lever linkage is at fault. 2. Hydraulic fluid is at fault. 3. Tank suction screen is clogged, or the suction line is drawing in air. 4. Pump or pump relief is at fault. 5. Hydraulic control valve at fault. 6. Damaged ram piston seals. 	<ol style="list-style-type: none"> 1. Repair bent or worn linkage to provide full travel. 2. Tank is empty or low, refill with hydraulic fluid. 3. Clean tank screen and service hydraulic system, replace suction line and hose clamps. 4. Replace valve, flush and service hydraulic system. 5. Replace ram assembly, and flush and service system. 6. Replace ram assembly, and flush and service system.
Splitter wedge moves forward too slowly or not at all, but retracts correctly.	<ol style="list-style-type: none"> 1. Control lever linkage is at fault. 2. Wedge is at fault or unsuitable log for splitting. 3. Hydraulic fluid is at fault. 4. Hydraulic control valve at fault. 5. Damaged ram piston seals. 	<ol style="list-style-type: none"> 1. Repair bent or worn linkage to provide full travel. 2. Sharpen wedge, and avoid splitting logs with twisted grain, a high moisture content, heavily knotted. 3. Fill tank to required fluid level. 4. Replace valve, flush and service hydraulic system. 5. Replace ram assembly, and flush and service system.
Splitter wedge retracts too slowly or not at all, but moves forward correctly.	<ol style="list-style-type: none"> 1. Control lever linkage is at fault. 2. Hydraulic control valve at fault. 3. Damaged ram piston seals. 	<ol style="list-style-type: none"> 1. Repair bent or worn linkage to provide full travel. 2. Replace control valve. 3. Replace ram assembly.



Hydraulic System Schematic

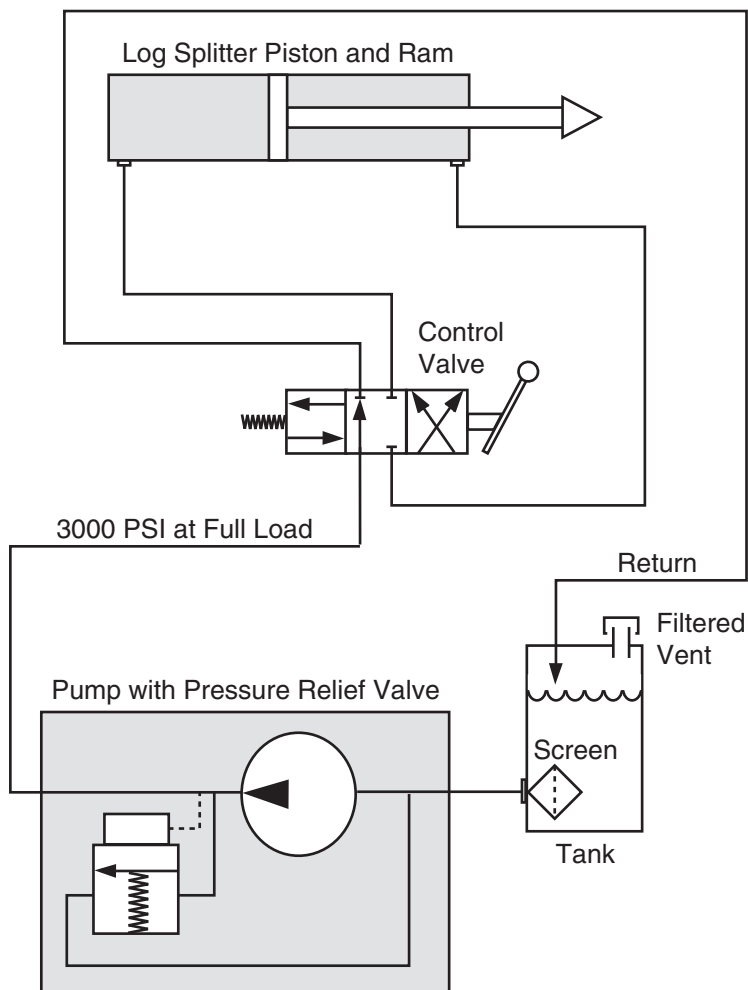


⚠️ WARNING

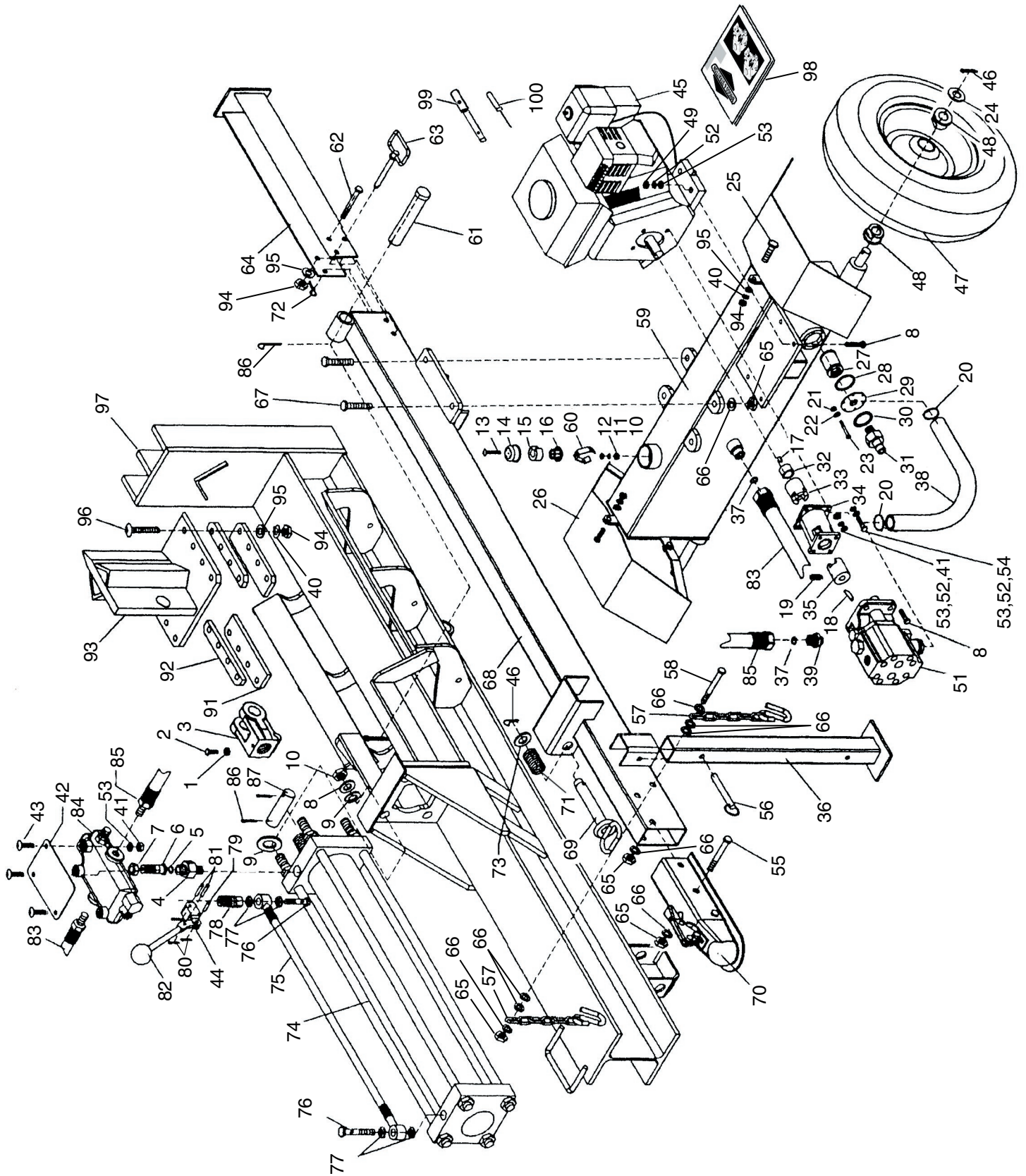
Before servicing the hydraulic system always disable the engine from starting, and depressurize the hydraulic system by moving the control lever back and fourth a few times. Ignoring this warning can lead to hydraulic fluid poisoning, which is a serious and potentially fatal injury.

NOTICE

This hydraulic schematic will help you identify hydraulic system components. However, it is not intended to be a how-to repair guide. Seek assistance from a professional hydraulic technician whenever servicing or repairing the hydraulic system.



Hydraulic and Chassis Diagram



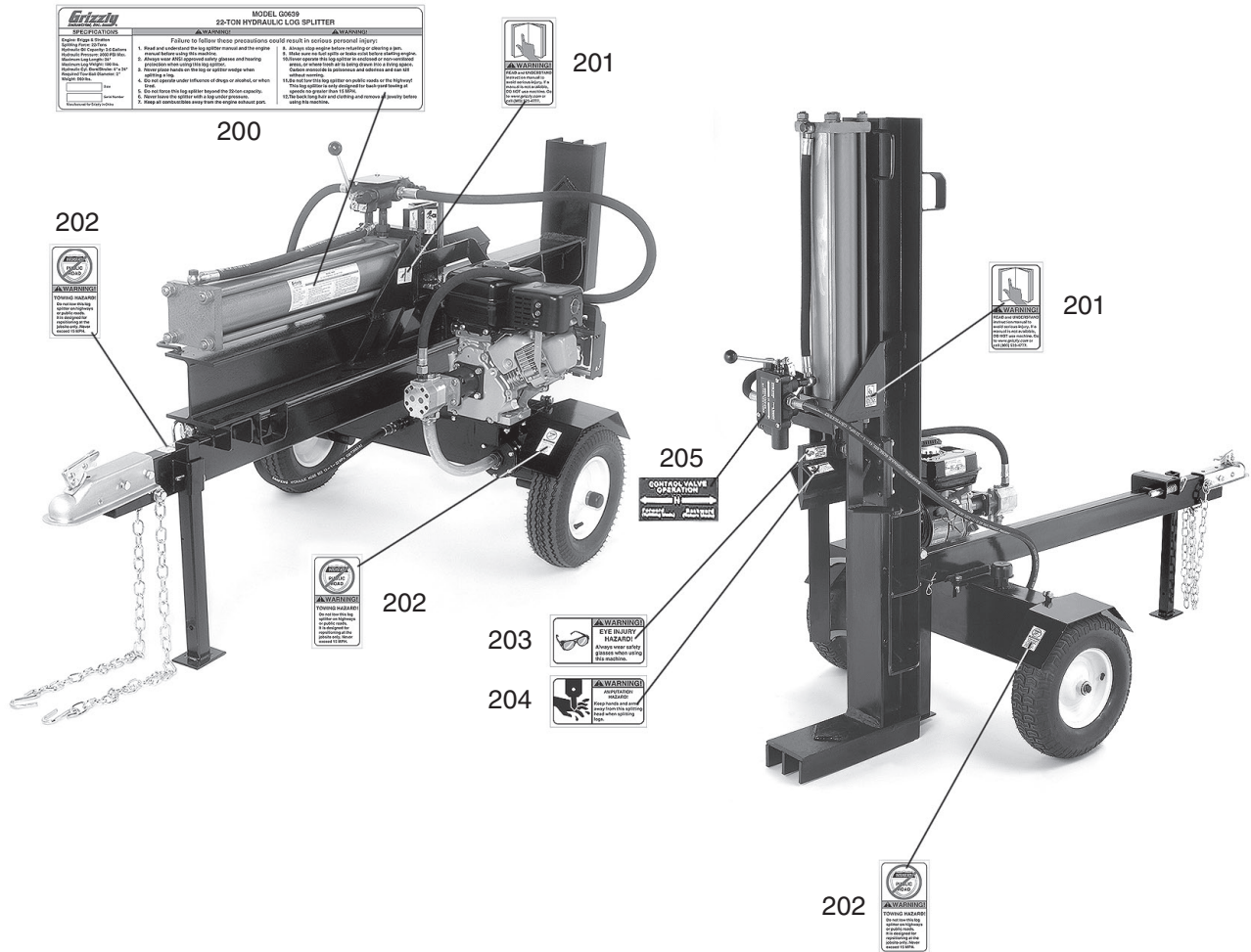
Parts List

REF	PART #	DESCRIPTION
1	PN03M	HEX NUT M8-1.25
2	PB09M	HEX BOLT M8-1.25 X 20
3	P0639003	PISTON ROD CONNECTOR
4	P0639004	FRONT COVER CONNECTOR
5	P0639005	O-RING 2.5 X 15
6	P0639006	VALVE JOINT
7	P0639007	FITTING NUT
8	PB118M	HEX BOLT M8-1.25 X 45
9	P0639009	ADJUSTMENT WASHER
10	PLW02M	LOCK WASHER 4MM
11	PW05M	FLAT WASHER 4MM
12	PN04M	HEX NUT M4-.7
13	PS02M	PHLP HD SCR M4-.7 X 12
14	P0639014	OIL CAP
15	P0639015	SPONGE
16	P0639016	OIL CAP BUSHING
17	P0639017	FLAT KEY
18	P0639018	WOODRUFF KEY
19	PS68M	PHLP HD SCR M6-1 X 10
20	P0639020	2" HOSE CLAMP
21	PW03M	FLAT WASHER 6MM
22	PLW03M	LOCK WASHER 6MM
23	PB123M	HEX BOLT M16-2 X 20
24	PW13M	FLAT WASHER 20MM
25	PB32M	HEX BOLT M10-1.5 X 25
26	P0639026	FENDER
27	P0639027	FILTER
28	P0639028	GASKET
29	P0639029	HUB CAP
31	P0639031	CONNECTOR
32	P0639032	BUSHING
33	P0639033	DRIVE HUB A
34	P0639034	HOUSING
35	P0639035	DRIVEN HUB B
36	P0639036	SUPPORT LEG
37	P0639037	O-RING 2.4 X 11
38	P0639038	SUCTION HOSE
39	P0639039	OUTLET CONNECTOR
40	PLW06M	LOCK WASHER 10MM
41	P0639041	LOCKING HEX NUT M8-1.25
42	P0639042	PLATE
43	P0639043	DOME HD SCR M8-1.25 X 45
44	P0639044	VALVE HANDLE CONNECTOR
45	P0639045	BRIGGS & STRATTON ENGINE 6.5HP
46	P0639046	COTTER PIN 4 X 30
47	P0639047	WHELL W/TIRE (4.80/4.00-8)
48	P0639048	AXLE BUSHING
49	PN03M	HEX NUT M8-1.25
50	PB118M	HEX BOLT M8-1.25 X 45
51	P0639051	HYDRAULIC PUMP

REF	PART #	DESCRIPTION
52	PLW04M	LOCK WASHER 8MM
53	PW01M	FLAT WASHER 8MM
54	PB07M	HEX BOLT M8-1.25 X 25
55	PB141M	HEX BOLT M12-1.75 X 80
56	P0639056	LOCK PIN
57	P0639057	SAFETY CHAIN W/HOOK
58	PB158M	HEX BOLT M12-1.75 X 90
59	P0639059	SUB FRAME
60	P0639060	BREATHER CAP CLIP
61	P0639061	HINGE PIN
62	P0639062	HEX BOLT M10-.1.5 X 75
63	P0639063	HITCH PIN
64	P0639064	REAR SUPPORT LEG
65	P0639065	LOCKING HEX NUT M12-1.75
66	P0639066	FLAT WASHER M12
67	PB35M	HEX BOLT M12-1.75 X 40
68	P0639068	TOW BAR
69	P0639069	HITCH PIN
70	P0639070	2" BALL RECEIVER
71	P0639071	COMPRESSION SPRING
72	P0639072	R-PIN 3 X 55
73	PW13M	FLAT WASHER 20MM
74	P0639074	HYDRAULIC CYLINDER ASSEMBLY
75	P0639075	TRANSFER TUBE
76	P0639076	BOLT CONNECTOR
77	P0639077	SEALWASHER
78	P0639078	VALVE JOINER
79	P0639079	CLEVIS PIN 5 X 18
80	P0639080	ROLL PIN 2 X 10
81	P0639081	CLEVIS PIN 5 X 28
82	P0639082	VALVE HANDLE
83	P0639083	RETURN HOSE
84	P0639084	CONTROL VALVE ASSEMBLY
85	P0639085	PRESSURE HOSE
86	P0639086	COTTER PIN 4 X 40
87	P0639087	WEDGE PIN
88	PN29M	HEX NUT M18-2.5
89	PW18M	FLAT WASHER 18MM
90	PLW12M	LOCK WASHER 18MM
91	P0639091	KEEPER PLATE
92	P0639092	KEEPER SPACER
93	P0639093	WEDGE SLIDE
94	P0639094	HIGH NUT M10-1.5
95	PW06M	FLAT WASHER 12MM
96	P0639096	DOME HEAD BOLT M12-1.5 X 55
97	P0639097	BEAM W/FOOT
97-1	P0639097-1	SAFETY CHAIN
98	P0639098	ENGINE OWNERS MANUAL
99	P0639099	SPARK PLUG SOCKET WRENCH
100	P0639100	SOCKET WRENCH HANDLE



Safety Label Placement & Parts List



REF	PART #	DESCRIPTION
200	P0639200	MACHINE ID & WARNING LABEL
201	P0639201	READ MANUAL LABEL
202	P0639202	NON ROAD USE LABEL

REF	PART #	DESCRIPTION
203	P0639203	WEAR SAFETY GLASSES LABEL
204	P0639204	CRUSHING HAZARD LABEL
205	P0639205	HYDRAULIC CONTROLS LABEL

!WARNING

Safety labels warn about machine hazards and ways to prevent injury. The owner of this machine **MUST** maintain the original location and readability of the labels on the machine. If any label is removed or becomes unreadable, **REPLACE** that label before using the machine again. Contact Grizzly at (800) 523-4777 or www.grizzly.com to order new labels.





WARRANTY CARD

Name _____
 Street _____
 City _____ State _____ Zip _____
 Phone # _____ Email _____ Invoice # _____
 Model # _____ Order # _____ Serial # _____

The following information is given on a voluntary basis. It will be used for marketing purposes to help us develop better products and services. **Of course, all information is strictly confidential.**

1. How did you learn about us?

Advertisement Friend Catalog
 Card Deck Website Other:

2. Which of the following magazines do you subscribe to?

<input type="checkbox"/> Cabinet Maker	<input type="checkbox"/> Popular Mechanics	<input type="checkbox"/> Today's Homeowner
<input type="checkbox"/> Family Handyman	<input type="checkbox"/> Popular Science	<input type="checkbox"/> Wood
<input type="checkbox"/> Hand Loader	<input type="checkbox"/> Popular Woodworking	<input type="checkbox"/> Wooden Boat
<input type="checkbox"/> Handy	<input type="checkbox"/> Practical Homeowner	<input type="checkbox"/> Woodshop News
<input type="checkbox"/> Home Shop Machinist	<input type="checkbox"/> Precision Shooter	<input type="checkbox"/> Woodsmith
<input type="checkbox"/> Journal of Light Cont.	<input type="checkbox"/> Projects in Metal	<input type="checkbox"/> Woodwork
<input type="checkbox"/> Live Steam	<input type="checkbox"/> RC Modeler	<input type="checkbox"/> Woodworker West
<input type="checkbox"/> Model Airplane News	<input type="checkbox"/> Rifle	<input type="checkbox"/> Woodworker's Journal
<input type="checkbox"/> Modeltec	<input type="checkbox"/> Shop Notes	<input type="checkbox"/> Other:
<input type="checkbox"/> Old House Journal	<input type="checkbox"/> Shotgun News	

3. What is your annual household income?

\$20,000-\$29,000 \$30,000-\$39,000 \$40,000-\$49,000
 \$50,000-\$59,000 \$60,000-\$69,000 \$70,000+

4. What is your age group?

20-29 30-39 40-49
 50-59 60-69 70+

5. How long have you been a woodworker/metalworker?

0-2 Years 2-8 Years 8-20 Years 20+ Years

6. How many of your machines or tools are Grizzly?

0-2 3-5 6-9 10+

7. Do you think your machine represents a good value?

Yes No

8. Would you recommend Grizzly Industrial to a friend?

Yes No

9. Would you allow us to use your name as a reference for Grizzly customers in your area?

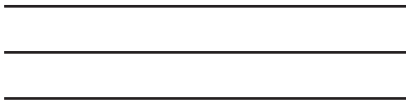
Note: We never use names more than 3 times.

Yes No

10. Comments: _____

CUT ALONG DOTTED LINE

FOLD ALONG DOTTED LINE



Place
Stamp
Here



GRIZZLY INDUSTRIAL, INC.
P.O. BOX 2069
BELLINGHAM, WA 98227-2069



FOLD ALONG DOTTED LINE

Send a Grizzly Catalog to a friend:

Name	_____
Street	_____
City	_____ State _____ Zip _____

TAPE ALONG EDGES--PLEASE DO NOT STAPLE

WARRANTY AND RETURNS

Grizzly Industrial, Inc. warrants every product it sells for a period of **1 year** to the original purchaser from the date of purchase. This warranty does not apply to defects due directly or indirectly to misuse, abuse, negligence, accidents, repairs or alterations or lack of maintenance. This is Grizzly's sole written warranty and any and all warranties that may be implied by law, including any merchantability or fitness, for any particular purpose, are hereby limited to the duration of this written warranty. We do not warrant or represent that the merchandise complies with the provisions of any law or acts unless the manufacturer so warrants. In no event shall Grizzly's liability under this warranty exceed the purchase price paid for the product and any legal actions brought against Grizzly shall be tried in the State of Washington, County of Whatcom.

We shall in no event be liable for death, injuries to persons or property or for incidental, contingent, special, or consequential damages arising from the use of our products.

To take advantage of this warranty, contact us by mail or phone and give us all the details. We will then issue you a "Return Number," which must be clearly posted on the outside as well as the inside of the carton. We will not accept any item back without this number. Proof of purchase must accompany the merchandise.

The manufacturers reserve the right to change specifications at any time because they constantly strive to achieve better quality equipment. We make every effort to ensure that our products meet high quality and durability standards and we hope you never need to use this warranty.

Please feel free to write or call us if you have any questions about the machine or the manual.

Thank you again for your business and continued support. We hope to serve you again soon.

grizzly.com

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